UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,784	03/18/2004	James Moore	241	8038

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PATENT DEPARTMENT
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EXAMINER
MORAN, RANDAL D

ART UNIT	PAPER NUMBER
2135	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/803,784	MOORE ET AL.
	Examiner	Art Unit
	Randal D. Moran	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 October 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25, 28-50, 53-56 and 71-80* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25, 28-50, 53-56 and 71-80* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>11/5/2007</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The Information Disclosure Statement filed 11/5/2007 has been seen and considered by the examiner.

2.   Claims 1-25, 28-50, 53-56, 71-80 are pending.

3.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/29/2007 has been entered.

4.   Below, Examiner has pointed out particular references contained in the prior art(s) of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully each reference in its entirety as potentially teaching all or

part of the claimed invention, as well as the context of the passage as taught by the prior

arts or disclosed by the examiner.

Claim Objections

The objections to **Claims 10, 11, 33, 37, 40, and 41** are withdrawn in view of

applicant arguments filed 6/26/2007 and 10/29/2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1.   **Claims 1-15, 17-23, 28, 29, 34, 38-43, 45-47, 49, 53-56, and 71-79** are

rejected under 35 U.S.C. 103(a) as being unpatentable over **Arkin et al. (US**

2002/0152262), hereafter "Arkin", in view of **Peled et al. (US 2002/0087885)**,

hereafter "Peled".

Considering **Claims 1, 34, and 73,** Arkin discloses a system for interdicting

unauthorized copying in a decentralized network (abstract, Fig. 11) comprising: one or

more computers having a plurality of software agents masquerading as nodes in a

decentralized network ([0109]-[0112], [0128]- Directory 114, [0167]- Repository

network nodes); and one or more second computers in communication with the one or

more first computers but no other nodes in the decentralized network having a query

matcher (Fig. 1, Fig. 4A, [0128]- sniffing user, [0169]- Network control node), and

reports matches of the search results with protected files back to the plurality of

software agents ([0128], [170]-[0173]) so that the software agents can interdict

unauthorized copying of the protected files in the decentralized network ([0174],

[[0241]).

Arkin does not explicitly disclose the one or more second computers receive

search results from the plurality of software agents. Arkin does suggest the repository

nodes receiving updated lists of Modified and IP protected items ([0128], [0203]-

[0214], an updated list of Modified and IP protected items are periodically updated to

the repository nodes, thereby influencing the search results of the query). The

placement of the query matcher is a mere design choice.

Peled discloses the one or more second computers receive search results from the

plurality of software agents ([0050]).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the teachings of Arkin by moving the repository of items

to the network control node and have all search results sent back to the network control node as taught by Peled for the benefit of reducing the load placed upon the repository nodes and allowing the nodes of the group to focus on handling IP protected item proliferation (Arkin- [0165], [0175]).

Considering **Claims 2 and 3,** the combination of Arkin and Peled discloses the assigned ports have corresponding IP addresses that change in a manner so as to deter detection of the plurality of software agents as unauthorized masqueraders of nodes in the decentralized network (Arkin- [0176]-[0177], Peled- [0032], [0078] lines 3-8, [0122]).

Considering **Claim 4,** the combination of Arkin and Peled discloses the number and geographical locations of the one or more first computers is determined by the number and geographical distribution of nodes in the decentralized network (Peled- [0033], [0039], Arkin- [0175], [0234]).

Considering **Claim 5,** the combination of Arkin and Peled discloses the one or more second computers have a database including metadata for the protected files (Arkin- [0169]).

Considering **Claim 6,** the combination of Arkin and Peled discloses a central

coordinating authority coordinating activities of the plurality of software agents so as to

interdict unauthorized copying in the decentralized network (Arkin- [0203]-[0214]).

Considering **Claim 7,** the combination of Arkin and Peled discloses the central

coordinating authority sends instructions to the plurality of software agents specifying

actions to be taken when the plurality of software agents receive matches of the search

results with protected files back from the query matcher (Arkin- [0203]-[0214], [0128],

Peled- [0050], [0058], [0096] lines 31-33).

Considering **Claims 8, 38, and 74,** the combination of Arkin and Peled

discloses the instructions sent by the central coordinating authority include an

instruction to generate modified search results (i.e. specifying actions) by deleting at

least a subset of references corresponding to the matches of the search results, and

forward the modified search results through the decentralized network (Arkin- [0170]-

[0173], Peled- [0050], [0058], [0096] lines 31-33, [0130] lines 3-6, deleting messages

that contain the protected content would remove the protected content from the search

results before they are returned to the network).

Considering **Claims 9-11, 39-41 and 75-77,** the combination of Arkin and

Peled discloses the instructions sent by the central coordinating authority include an

instruction to generate modified search results by modifying at least a subset of

references corresponding to the matches of the search results so as to point to one or more IP addresses that are invalid, and forward the modified search results through the decentralized network (Peled- [0118] lines 4-6, [0119] lines 7-9).

Considering **Claims 12, 42, and 78,** the combination of Arkin and Peled discloses the instructions sent by the central coordinating authority include an instruction to generate modified search results by modifying at least a subset of references corresponding to the matches of the search results so as to point to alternative files, and forward the modified search results through the decentralized network (Arkin- [0173], [0179], Peled- [0118] lines 4-9).

Considering **Claim 13,** the combination of Arkin and Peled discloses the alternative files include at least one randomly selected file residing on a node upon which one of the matches of the search results resides (Peled- [0118] lines 4-9).

Considering **Claims 14, 43, and 79,** the combination of Arkin and Peled discloses the alternative files include at least one decoy file residing on a host node controlled by the central coordinating authority (Peled- [0118] lines 4-9, [0120] lines 7-14).

Considering **Claim 15,** the combination of Arkin and Peled discloses the

alternative files include at least one randomly selected file residing on a host node

controlled by the central coordinating authority (Peled- [0118] lines 4-9).

Considering **Claims 17 and 45,** the combination of Arkin and Peled discloses

the instructions sent by the central coordinating authority include an instruction to send

an alternative file to a client node when a request for a protected file is received from the

client node (Arkin- [0169]-[0174], Peled- [0118] lines 4-17).

Considering **Claims 18 and 46,** the combination of Arkin and Peled discloses

the alternative file is a decoy (Arkin- [0154], Peled- [0118] lines 4-9, [0119] lines 7-13).

Considering **Claims 19-23, 47, and 49,** the combination of Arkin and Peled

discloses the decoy is an audio file containing white noise, the decoy is a video file

containing white noise, the decoy is an application containing a NOP executable that

terminates the application when executed, the decoy is an image file containing snow,

the decoy is a document with blank contents (Peled- [0118] lines 4-9, [0019] lines 7-13).

Considering **Claims 28, 53, and 54,** the combination of Arkin and Peled

discloses the instructions sent by the central coordinating authority include an

instruction to modify at least one reference corresponding to a match in the search

results so as to point to a non-existent file along with a reported hash value that does not

correspond to any file in the decentralized network instead of the at least one reference (Peled- [0024], [0096] lines 19-41, [0120] lines 7-14).

Considering **Claims 29 and 55,** the combination of Arkin and Peled discloses the instructions sent by the central coordinating authority include an instruction to modify a reference corresponding to a match in the search results so as to point to a spoof file instead of the reference and report a hash value matching that of the reference even though the contents of the spoof file do not exactly match that of the reference (Peled- [0096] lines 19-41, [0120] lines 7-14).

Considering **Claim 56,** the combination of Arkin and Peled discloses one of the communications is a request to one of the plurality of software agents from a client node for at least a segment of a protected file (Peled- [0128], [0129]), and the interdicting of unauthorized copying comprises: transmitting data to the client node in response to the request so that a corrupted file is detected upon completion of downloading of the protected file to the client node (Arkin- [0118] lines 4-6, [0120]).

Considering **Claims 71 and 72,** the combination of Arkin and Peled discloses the one or more first computers communicate with the one or more second computers over a private network (Arkin- [0203]).

3. **Claims 16, 24, 25, 30-33, 35-37, 44, 48, 50, and 80** are rejected under 35

U.S.C. 103(a) as being unpatentable over **Arkin and Peled** in view of **Schmelzer**

(WO 02/082271), hereafter "Schmelzer".

Considering **Claims 16, 25, 44, 50, and 80,** the combination does not

explicitly disclose the alternative files include at least one rights-managed version of the

matches. Arkin discloses the supplemental material in the modified items is a purchase

offer for the network node to purchase a usable copy of the modified item ([0179]).

Schmelzer discloses the alternative files include at least one rights-managed

version of the matches (p.13- lines 14-20 and 26-31, p. 15- lines 15-19, Fig. 20, Fig. 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify the combination by responding to request for

protected content by directing the user to a rights-managed version of the data as taught

by Schmelzer in order to provide a reliable and secure system for enabling intellectual

property owners to distribute digital materials while preventing infringement of

intellectual property rights (Schmelzer- p. 5- lines 8-10). It is of great interest to find a

method that may stop or at least reduce copyright infringement without interfering with

the lawful use of file sharing systems (Peled- [0003] lines 6-9)

Considering **Claims 24 and 48,** the combination discloses the decoy contains an anti-piracy message (Schmelzer- p.13- lines 14-20 and 26-31, p.15- lines 15-19, Fig. 1, Fig. 2, Arkin- [0179], Peled- [0118]).

Considering **Claims 30, 31, and 35,** the combination discloses the decentralized network is an hierarchical network with supernodes and regular nodes (Arkin- Fig. 11, Schmelzer- p. 7- lines 14-19, the supernodes in the network would be routers having content recognition capability, Peled- Fig. 3, Fig. 4, [0035], the surveillance elements act as servers with the capability to allow them to obtain data of documents on the system for search functionality, these elements act as the supernodes), and the plurality of software agents masquerade as regular nodes that inform their respective supernodes that they have copies of protected files and claim node attributes so that the plurality of software agents will be selected as top matches by their respective supernodes for search strings indicating the protected files (Arkin- [0165], [0173], Peled- [0033], [0038]-[0041]).

Considering **Claims 32, 33, 36 and 37,** the combination discloses the decentralized network is an hierarchical network with supernodes and regular nodes (Arkin- Fig. 11, Schmelzer- p. 7- lines 14-19, the supernodes in the network would be routers having content recognition capability, Peled- Fig. 3, Fig. 4, [0035], the surveillance elements act as servers with the capability to allow them to obtain data of documents on the system for search functionality, these elements act as the

supernodes), and the plurality of software agents inform the decentralized network that they are supernodes according to the protocol of the decentralized network (Arkin- [0172], [0173], [0234], Peled- [0033], [0038]-[0041], [0122]).

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

1.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randal D. Moran whose telephone number is 571-270-1255. The examiner can normally be reached on M-F: 7:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
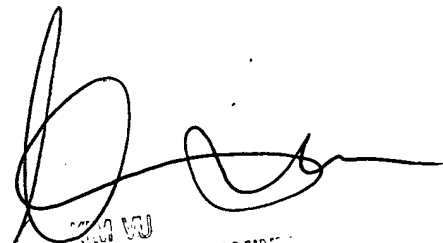
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Randal D. Moran
/RDM/

1/31/2008